

great respect and admiration for Mr. vanMelle's ability as a plantsman, for his knowledge of his particular group, and especially for his patient good nature."

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- (1) vanMelle, P. J. in *Phytologia* 2:353-363, 1947.  
 (2) vanMelle, P. J. Review of *Juniperus chinensis* et. al. New York, April 1947.
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### NOTES ON POLYGONUM. III

J. F. Brenckle

Polygonum Exsiccatum (Avicularia) Fascicle 1, issued in January 1947, is the first of a series to be issued at irregular intervals. There will be 36 copies of this exsiccatum, the specimens of each number to be as much alike as possible and to be collected on the same date and at the same place. The specimens have been selected to bring together forms that are often mistaken for each other and also to group species for a phylogeographical study and classification which is to be published later. Several new species and forms are introduced, specimens of which in this fascicle may be considered as co-type material.

The exsiccatum is being distributed to active collaborators and some larger herbaria. Contributions to this series are solicited.

#### List of species and forms in Fascicle One:

- No. 1. Polygonum interior new species, forma vernalis.  
 No. 2. Polygonum interior new species.  
 No. 3. Polygonum interior new species, forma rostratum.  
 No. 4. Polygonum interior var. Turneri Brenckle new variety.  
 No. 5. Polygonum ramosissimum Michx., forma vernalis.  
 No. 6. Polygonum ramosissimum Michx.  
 No. 7. Polygonum ramosissimum Michx., forma rostratum.  
 No. 8. Polygonum latum Small, forma vernalis.  
 No. 9. Polygonum latum Small.  
 No. 10. Polygonum prolificum (Small) Robins. var. autumnale Brenckle new name.  
 No. 11. Polygonum prolificum (Small) Robins. var. profusum Brenckle new variety.  
 No. 12. Polygonum prolificum (Small) Robins. var. profusum Brenckle forma rostratum.  
 No. 13. Polygonum achoreum Blake.  
 No. 14. Polygonum camporum Meisen., forma vernalis.

- No. 15. Polygonum camporum Meisn., forma rostratum.  
 No. 16. Polygonum argyrocoleon Steud.  
 No. 17. Polygonum argyrocoleon Steud.  
 No. 18. Polygonum Faronychia Cham. & Schl.  
 No. 19. Polygonum Faronychia Cham. & Schl.  
 No. 20. Polygonum majus (Meisn.) Piper.  
 No. 21. Polygonum emaciatum A. Nels.  
 No. 22. Polygonum emaciatum A. Nels.  
 No. 23. Polygonum Englemanni Greene.  
 No. 24. Polygonum sawatchense Small.  
 No. 25. Polygonum tenue Michx.

Polygonum interior new species.

Herba annua atroviridis rectis gracilis multibrachiata striata 4--8 dm. alta dein rubescens; ramis patentibus attenuatis argute angulatis; foliis caulium oblongo-lanceolatis ad basin apicemque acutis 3--6 cm. longis 3--8 mm. latis fugacibus; foliis ramorum reductis linearibus vel nullis; ocreis pallidis ad basin rubellis inconspicuis.

Annual, dark green, erect, slender, much branched from the base, striate, 4--8 dm. high, becoming reddish with age; branches spreading, attenuate, sharply angled; stem-leaves oblong-lanceolate, pointed at each end, short-petioled, 3--6 cm. long, 3--8 mm. wide, fugacious; branch-leaves reduced, linear or absent; ocreae pale, reddish at the base, inconspicuous; perianth sharply triangular, carinate, divided to near the base into 5 segments, the 3 outer longer, white-margined or pink-edged, 3 mm. long, pedicellate; achenes narrow, pointed, with the apex edges sharper than those of the body, one of the faces slightly umbonate, chestnut-brown, smooth, vaguely puncticulate, 2--3 mm. long, some later achenes becoming attenuated to 6 mm. long and exserted.

Among vegetation at the margins of ponds or in ditches. The species differs from Polygonum exsertum and Polygonum leptocarpum in that it matures most of its achenes within the pericarp and produces exserted achenes late in the season or none. The plants are generally smaller and more slender than P. exsertum.

Specimens examined: South Dakota, Brenckle nos. 3726, 3727, 3852, 3848, 3865, 4165, distributed as P. exsertum; North Dakota, Stevens nos. 212, 442, 463, 656; Alberta, Turner nos. 2314, 4283; Saskatchewan, W. P. Fraser no. 10, Aug. 1939.

Type locality: margin of a pond fed by artesian wells, half mile northeast of Mellette, South Dakota. The type specimen is deposited in the Britton Herbarium at the New York Botanical Garden. Co-type material is distributed in Fascicle 1, nos. 1, 2, 3.

Polygonum interior var. Turneri new variety.

Herba annua flavido-viridis; caule recto 6--9 dm. alto, med-

iam elongato 6--7.5 cm. longo, basin versus incrassato; foliis 3--7 cm. longis 3--8 mm. latis.

Annual, yellowish green; stem erect, 6--9 dm. high, the middle sections elongated, 6--7.5 cm. long, the lower half thickened; leaves 3--7 cm. long, 3--8 mm. wide.

Collected by Dr. George H. Turner near Fort Saskatchewan, Alberta, the type locality being one mile north of Fort Saskatchewan. The type specimen is deposited in the Britton Herbarium at the New York Botanical Garden. Co-type material is distributed in Fascicle 1, no. 4.

Polygonum prolificum (Small) Robins.

This species is widely distributed, its area extending from the Atlantic seaboard to the Inter-Mountain regions, Utah, and from Canada to Texas. It is completely at home on the Inland Plains in various semi-arid and humid locations where it assumes a variety of forms. It may be erect, slender and sparingly branched, or it may become a robust, bushy, much branched and spreading plant, or be completely prostrate. It was first described as a variety of P. ramosissimum, but to this species it has no close phylogenetic relationship. The general structure of the plant, leaves and achenes are quite distinct, nor do the species hybridize. My conclusion is that this species and its ancestor have long occupied this inland American area and were common on the shores of our ancient Inland Sea. The following two varieties are distributed as nos. 10, 11, and 12 in Fascicle 1.

Polygonum prolificum (Small) Robins. var. autumnale Brenckle, new name.

Published as P. autumnale in the Bulletin of the Torrey Botanical Club, vol. 68, p. 495.

Polygonum prolificum (Small) Robins. var. profusum new variety.

Herba annua robusta late patens ramosissima, seminibus plerumque autumnale productis.

A robust wide-spreading annual, bushy, branching heavily from the base. Its main crop of seed is produced in the fall. Common in South Dakota. The type locality is a wet meadow half a mile northeast of Mellette, South Dakota. The type specimen is deposited in the Britton Herbarium at the New York Botanical Garden. Co-type material is distributed as nos. 11 and 12 in Fascicle 1.

The Phylad Polygonum Faronychia.

The species represented by nos. 13 to 25 of Fascicle 1 are evidently genetically related and with some others form a well-defined phylad of polygonums. The area of origin and the known distribution are indicated. The characters common to the spe-

cies of this section are (1) a raven-black achene, which, while maturing, does not pass through shades of brown or chestnut coloration. Usually it is smooth and shining, but may become more or less punctate or striate in some species; (2) a distinctive and often large colored perianth; (3) the structure of the leaves is suggestive, mostly narrow with revolute edges, a prominent mid-rib and plication in some species.

Folygonum Faronychia Cham. & Schl. is a perennial with woody stems. Its area is restricted, extending along the seacoast from mid-California to British Columbia; clearly a relic species. The habitat given is "prostrate on sand along the coast." Fascicle 1, specimen no. 18. Material collected from a clay bluff was erect and bushy, and is represented by specimen no. 19.

Folygonum majus (Meisn.) Piper is represented by two forms: (1) a robust, larger, woody-stemmed form which at times is biennial and perhaps perennial. The area of this form is along the shores and benches of the Columbia and Snake Rivers at elevations of 50 to 200 feet. The benches mentioned represent old seacoast lines before elevation of the country and were then occupied, no doubt, by the ancestral F. Faronychia. (2) A more slender herbaceous form which occurs over the same area and to higher elevations surrounding it. This form is often difficult to distinguish from F. spergulariaeforme because the achenes, leaves, flowers and distribution are similar.

Additional members of this phylad will be distributed in future fascicles.

Folygonum emaciatum A. Nels.

This is a subspecies of Folygonum Douglassii Greene. Its area is the more arid mountain regions. The distinguishing characters are the linear leaves, slender stems, and striated achenes which are somewhat shorter, 2.5--3 mm. long. Represented by nos. 21 and 22 in Fascicle 1.

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Among a number of polygonums sent me by Reverend Ernest Lapage of Quebec, collected in northern Canada and Alaska, is one which is here described as a new species:

Fersicaria Onsilii new species.

Herba annua parva; caule breve basin versus brachiato prostrato; ramis gracilibus obscure 3- vel 4-angulatis rubello-brunneis 1--6 cm. longis foliosis; foliis oblongo-lanceolatis vel spatulatis ad apicem rotundatis, ad basin in petiolum brevem attenuatis, 1.5--3 cm. longis, 2--5 mm. latis, saepe subtus tomentosis; inflorescentiis axillaribus terminalibusque, racemis interruptis ad apicem sphaericis vel ovalibus, 5--8 mm. longis, 5 mm. latis.

A small annual; stems short, several- to many-branched near

the tap-root, prostrate; branches slender, obscurely 3- or 4-angled, reddish-brown, 1--6 cm. long, leafy; leaves oblong-lanceolate or spatulate, rounded at the end and tapering to a short petiole, often tomentose on the lower side, 1.5--3 cm. long, 2--5 mm. wide; inflorescence in the axils of leaves and in terminal, interrupted racemes, the terminal section being spherical or oval, 5--8 mm. long, and 5 mm. wide; perianth greenish, flattened, 5-parted to near the base, the sections white-edged and sometimes reddish-tinted; achenes lenticular, circular, biconcave, slightly umbonate, dark brown, dull, 2.5 mm. in diameter.

Type locality: on the Nabesna Road, Mile 89, in Alaska, June 24, 1947, collected by Dutilly, Iapage, and O'Neill no. 21556. This dwarf subarctic plant is related to Fersicaria tomentosa (Schrank) Bicknell and Fersicaria scabra (Moench). The leafy inflorescence and the dull, reddish-brown achenes clearly distinguish it. I take pleasure in naming this species in honor of Rev. Hugh O'Neill, who has long collected and studied the northern Canadian and Alaskan floras. The type specimen is deposited in the Langlois Herbarium at the Catholic University of America, Washington, D. C.

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#### A NEW SPECIES OF EUPATORIUM FROM THE WEST INDIES

Joseph V. Monachino

In 1945 I had the pleasure of identifying specimens of phanerogams collected by José I. Ctero and C. E. Chardon on Mona Island, an island having an area of about twenty square miles and lying midway between Puerto Rico and Hispaniola. These specimens are to serve as botanical vouchers for species to be discussed in Dr. Ctero's forthcoming article on the vegetation of Mona Island. A new species of Eupatorium was discovered among the collection. As it might be a rather long time before his manuscript appears in print, Dr. Ctero has requested that I legitimize the name of this novelty by formal publication at this time.

EUPATORIUM OTEROI Monachino, sp. nov. Fruticulus glaber; foliis oppositis non punctatis, petiolis ca. 1--2 cm. longis, lamina ovatis vel ovato-lanceolatis, ca. 2.5--5 cm. longis, 1.5--3.5 cm. latis, ad apicem acutis vel obtusis, ad basin late cuneatis, plerumque serratis; inflorescentiis corymbosis multicapitatis, capitulis ca. 12-floribus, involucriis cylindrico-ellipticis, 4.5--5 mm. longis, bracteis imbricatis ca. 4-seriatis oblongis vel anguste spatulato-oblongis, ca. 2--4